

Appl. No. 09/965,426
Amdt. dated October 7, 2003
Reply to Office Action of May 7, 2003

Customer No. 30223

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-37 (Cancelled).

38. (Currently Amended) A method of manufacturing a modified atmosphere package, comprising:

supplying a package, a first layer having at least a portion being substantially permeable to oxygen and a second layer being substantially impermeable to oxygen;

placing a retail cut of raw meat within the package;

supplying a mixture of gases within the package, the gas mixture comprising from about 0.1 to about 0.8 vol.% carbon monoxide and at least one other gas to form a low oxygen environment so as to form carboxymyoglobin on a surface of the raw meat;

removing oxygen within the package so as to sufficiently reduce an oxygen level therein so as to inhibit or prevent the formation of metmyoglobin on the surface of the raw meat;

sealing the first layer to the package; and

sealing the second layer to at least one of the package and the first layer, the second layer being adapted to be removed such that the second layer is no longer sealed to the package or the first layer, and the first layer remains sealed to the package.

39. (Original) The method of claim 38, wherein a pocket is formed between the first layer and the second layer.

40. (Original) The method of claim 38, wherein the second layer is at least sealed to the first layer and the second layer is adapted to be peelable from the first layer.

41. (Currently Amended) The method of claim 38, wherein the package includes a bottom wall, a continuous side wall, and a continuous rim, the continuous side wall

BEST AVAILABLE COPY

Appl. No. 09/965,426
Amdt. dated October 7, 2003
Reply to Office Action of May 7, 2003

Customer No. 30223

encompassing encompasses the bottom wall and extending extends upwardly and outwardly from the bottom wall, the continuous rim encompassing encompasses an upper edge of the continuous side wall and projecting projects generally laterally outwardly therefrom.

42. (Currently Amended) The method of claim 38 further including ~~the step of~~ removing the second layer.

43. (Original) The method of claim 38 further including supplying an oxygen scavenger.

44. (Original) The method of claim 38, wherein the oxygen level in the package is less than 1,000 ppm.

45. (Currently Amended) The method of claim 38 44, wherein the oxygen level in the package is less than about 500 ppm.

46. (Currently Amended) The method of claim 38, wherein ~~the step of~~ removing oxygen from the package includes evacuating the package.

47. (Currently Amended) The method of claim 38, wherein ~~the step of~~ removing oxygen from the package includes flushing the package with the gas mixture.

48. (Original) The method of claim 38, wherein the gas mixture further comprises nitrogen, carbon dioxide or the combination thereof.

49. (Original) The method of claim 38, wherein the gas mixture consists essentially of from about 0.1 to about 0.8 vol.% carbon monoxide, from about 40 to about 80 vol.% nitrogen and from about 20 to about 60 vol.% carbon dioxide.

Appl. No. 09/965,426
Arndt. dated October 7, 2003
Reply to Office Action of May 7, 2003

Customer No. 30223

50. (Original) The method of claim 38, wherein the gas mixture consists of from about 0.1 vol.% to about 0.6 vol.% carbon monoxide with the remainder carbon dioxide.

51. (Original) The method of claim 38 further including placing the retail cut of raw meat on a foam tray.

52. (Currently Amended) The method of claim 38, wherein the ~~non-barrier~~ portion being substantially permeable to oxygen comprises a polyolefin or a polyvinyl chloride overwrap.

53. (Original) The method of claim 38, wherein the gas mixture is supplied to the package such that the oxymyoglobin substantially converts directly to carboxymyoglobin.

54. (Original) The method of claim 38, wherein the oxymyoglobin substantially converts to deoxymyoglobin before the gas mixture is supplied to the package so as to convert deoxymyoglobin directly to carboxymyoglobin.

55. (Original) The method of claim 38, wherein the gas mixture comprises from about 0.3 to about 0.5 vol.% carbon monoxide.

56. (Original) The method of claim 38, wherein the gas mixture comprises from about 0.1 to about 0.5 vol.% carbon monoxide.

57-75. (Cancelled).

76. (Currently Amended) A modified atmosphere package, comprising:
a package being configured and sized to fully enclose a retail cut of raw meat, the package having a mixture of gases comprising from about 0.1 to about 0.8 vol.% carbon monoxide and at least one other gas to form a low oxygen environment so as to form carboxymyoglobin on a surface of the raw meat;
a first layer having at least a portion being substantially permeable to oxygen and sealed

Appl. No. 09/965,426
Amdt. dated October 7, 2003
Reply to Office Action of May 7, 2003

Customer No. 30223

to the package; and

a second layer being substantially impermeable to oxygen and sealed to at least one of the package and the first layer, the second layer being adapted to be removed such that the second layer is no longer sealed to the package or the first layer, and the first layer remains sealed to the package.

77. (Original) The package of claim 76, wherein a pocket is formed between the first layer and the second layer.

78. (Original) The package of claim 76, wherein the second layer is at least sealed to the first layer and the second layer is adapted to be peelable from the first layer.

79. (Currently Amended) The package of claim 76, wherein the package includes a bottom wall, a continuous side wall, and a continuous rim, the continuous side wall encompassing encompasses the bottom wall and extending extends upwardly and outwardly from the bottom wall, the continuous rim encompassing encompasses an upper edge of the continuous side wall and projecting projects laterally outwardly therefrom.

80. (Original) The package of claim 76 further including supplying an oxygen scavenger.

81. (Original) The package of claim 76, wherein the oxygen level in the package is less than 1,000 ppm.

82. (Original) The package of claim 81, wherein the oxygen level in the package is less than about 500 ppm.

83. (Original) The package of claim 76, wherein the gas mixture consists essentially of from about 0.1 to about 0.8 vol.% carbon monoxide, from about 40 to about 80 vol.% nitrogen and from about 20 to about 60 vol.% carbon dioxide.

Appl. No. 09/965,426
Amtd. dated October 7, 2003
Reply to Office Action of May 7, 2003

Customer No. 30223

84. (Original) The package of claim 77, wherein the package further includes a foam tray sized to hold the meat.

85. (Original) The package of claim 77, wherein the gas mixture comprises from about 0.3 to about 0.5 vol.% carbon monoxide.

86. (Original) The package of claim 77, wherein the gas mixture comprises from about 0.1 to about 0.5 vol.% carbon monoxide.

87. (New) A method of manufacturing a modified atmosphere package, comprising:

- supplying a package
- supplying a layer being substantially impermeable to oxygen;
- placing a retail cut of raw meat within the package;
- supplying a mixture of gases within the package, the gas mixture comprising from about 0.1 to about 0.8 vol.% carbon monoxide and at least one other gas to form a low oxygen environment so as to form carboxymyoglobin on a surface of the raw meat;
- removing oxygen within the package so as to sufficiently reduce an oxygen level therein so as to inhibit or prevent the formation of metmyoglobin on the surface of the raw meat;
- sealing the layer substantially impermeable to oxygen to the package;
- removing the layer substantially impermeable to oxygen from the package such that the gas mixture exits the package; and
- sealing a layer having at least a portion being substantially permeable to oxygen to the package.

88. (New) The method of claim 87, wherein the package includes a bottom wall, a continuous side wall, and a continuous rim, the continuous side wall encompasses the bottom

Appl. No. 09/965,426
Amdt. dated October 7, 2003
Reply to Office Action of May 7, 2003

Customer No. 30223

wall and extends upwardly and outwardly from the bottom wall, the continuous rim encompasses an upper edge of the continuous side wall and projects generally laterally outwardly therefrom.

89. (New) The method of claim 87 further including supplying an oxygen scavenger.
90. (New) The method of claim 87, wherein the oxygen level in the package is less than 1,000 ppm.
91. (New) The method of claim 90, wherein the oxygen level in the package is less than about 500 ppm.
92. (New) The method of claim 87, wherein removing oxygen from the package includes evacuating the package.
93. (New) The method of claim 87, wherein removing oxygen from the package includes flushing the package with the gas mixture.
94. (New) The method of claim 87, wherein the gas mixture further comprises nitrogen, carbon dioxide or the combination thereof.
95. (New) The method of claim 87, wherein the gas mixture consists essentially of from about 0.1 to about 0.8 vol.% carbon monoxide, from about 40 to about 80 vol.% nitrogen and from about 20 to about 60 vol.% carbon dioxide.
96. (New) The method of claim 87, wherein the gas mixture consists of from about 0.1 vol.% to about 0.6 vol.% carbon monoxide with the remainder carbon dioxide.
97. (New) The method of claim 87 further including placing the retail cut of raw meat on a foam tray.

Appl. No. 09/965,426
Amtd. dated October 7, 2003
Reply to Office Action of May 7, 2003

Customer No. 30223

98. (New) The method of claim 87, wherein the portion being substantially permeable to oxygen comprises a polyolefin or a polyvinyl chloride overwrap.

99. (New) The method of claim 87, wherein the gas mixture is supplied to the package such that the oxymyoglobin substantially converts directly to carboxymyoglobin.

100. (New) The method of claim 87, wherein the oxymyoglobin substantially converts to deoxymyoglobin before the gas mixture is supplied to the package so as to convert deoxymyoglobin directly to carboxymyoglobin.

101. (New) The method of claim 87, wherein the gas mixture comprises from about 0.3 to about 0.5 vol.% carbon monoxide.

102. (New) The method of claim 87, wherein the gas mixture comprises from about 0.1 to about 0.5 vol.% carbon monoxide.

103. (New) A method of manufacturing a modified atmosphere package, comprising:
supplying a package
supplying a layer being substantially impermeable to oxygen;
placing a retail cut of raw meat within the package;
supplying a mixture of gases within the package, the gas mixture comprising from about 0.1 to about 0.8 vol.% carbon monoxide and at least one other gas to form a low oxygen environment so as to form carboxymyoglobin on a surface of the raw meat;
removing oxygen within the package so as to sufficiently reduce an oxygen level therein so as to inhibit or prevent the formation of metmyoglobin on the surface of the raw meat;
sealing the layer substantially impermeable to oxygen to the package;
removing the layer substantially impermeable to oxygen from the package before retail display such that the gas mixture exits the package; and

Appl. No. 09/965,426
Amtd. dated October 7, 2003
Reply to Office Action of May 7, 2003

Customer No. 30223

sealing a layer having at least a portion being substantially permeable to oxygen to the package for retail display.

104. (New) The method of claim 103, wherein the package includes a bottom wall, a continuous side wall, and a continuous rim, the continuous side wall encompasses the bottom wall and extends upwardly and outwardly from the bottom wall, the continuous rim encompasses an upper edge of the continuous side wall and projects generally laterally outwardly therefrom.

105. (New) The method of claim 103 further including supplying an oxygen scavenger.

106. (New) The method of claim 103, wherein the oxygen level in the package is less than 1,000 ppm.

107. (New) The method of claim 106, wherein the oxygen level in the package is less than about 500 ppm.

108. (New) The method of claim 103, wherein removing oxygen from the package includes evacuating the package.

109. (New) The method of claim 103, wherein removing oxygen from the package includes flushing the package with the gas mixture.

110. (New) The method of claim 103, wherein the gas mixture further comprises nitrogen, carbon dioxide or the combination thereof.

111. (New) The method of claim 103, wherein the gas mixture consists essentially of from about 0.1 to about 0.8 vol.% carbon monoxide, from about 40 to about 80 vol.% nitrogen and from about 20 to about 60 vol.% carbon dioxide.

Appl. No. 09/965,426
Amdt. dated October 7, 2003
Reply to Office Action of May 7, 2003

Customer No. 30223

112. (New) The method of claim 103, wherein the gas mixture consists of from about 0.1 vol.% to about 0.6 vol.% carbon monoxide with the remainder carbon dioxide.

113. (New) The method of claim 103 further including placing the retail cut of raw meat on a foam tray.

114. (New) The method of claim 103, wherein the portion being substantially permeable to oxygen comprises a polyolefin or a polyvinyl chloride overwrap.

115. (New) The method of claim 103, wherein the gas mixture is supplied to the package such that the oxymyoglobin substantially converts directly to carboxymyoglobin.

116. (New) The method of claim 103, wherein the oxymyoglobin substantially converts to deoxymyoglobin before the gas mixture is supplied to the package so as to convert deoxymyoglobin directly to carboxymyoglobin.

117. (New) The method of claim 103, wherein the gas mixture comprises from about 0.3 to about 0.5 vol.% carbon monoxide.

118. (New) The method of claim 103, wherein the gas mixture comprises from about 0.1 to about 0.5 vol.% carbon monoxide.

119. (New) A method of manufacturing a modified atmosphere package, comprising:
supplying a package, a first layer having at least a portion being substantially permeable to oxygen and a second layer being substantially impermeable to oxygen;
placing a retail cut of raw meat within the package;
supplying a mixture of gases within the package, the gas mixture comprising from about 0.1 to about 0.8 vol.% carbon monoxide and at least one other gas to form a low oxygen environment so as to form carboxymyoglobin on a surface of the raw meat;

Appl. No. 09/965,426
Amdt. dated October 7, 2003
Reply to Office Action of May 7, 2003

Customer No. 30223

removing oxygen within the package so as to sufficiently reduce an oxygen level therein so as to inhibit or prevent the formation of metmyoglobin on the surface of the raw meat;

sealing the first layer to the package;

sealing the second layer to at least one of the package and the first layer; and

opening the package such that the raw meat is allowed to be exposed to the ambient atmosphere.

120. (New) The method of claim 119, wherein a pocket is formed between the first layer and the second layer.

121. (New) The method of claim 119, wherein the second layer is at least sealed to the first layer and the second layer is peeled from the first layer such that the raw meat is allowed to be exposed to the ambient atmosphere through the second layer.

122. (New) The method of claim 119, wherein the second layer is at least sealed to the package and the second layer is peeled from the package such that the raw meat is allowed to be exposed to the ambient atmosphere through the second layer.

123. (New) The method of claim 119, wherein the package includes a bottom wall, a continuous side wall, and a continuous rim, the continuous side wall encompasses the bottom wall and extends upwardly and outwardly from the bottom wall, the continuous rim encompasses an upper edge of the continuous side wall and projects generally laterally outwardly therefrom.

124. (New) The method of claim 119 further including supplying an oxygen scavenger.

125. (New) The method of claim 119, wherein the oxygen level in the package is less than 1,000 ppm.

Appl. No. 09/965,426
Amtd. dated October 7, 2003
Reply to Office Action of May 7, 2003

Customer No. 30223

126. (New) The method of claim 125, wherein the oxygen level in the package is less than about 500 ppm.

127. (New) The method of claim 119, wherein removing oxygen from the package includes evacuating the package.

128. (New) The method of claim 119, wherein removing oxygen from the package includes flushing the package with the gas mixture.

129. (New) The method of claim 119, wherein the gas mixture further comprises nitrogen, carbon dioxide or the combination thereof.

130. (New) The method of claim 119, wherein the gas mixture consists essentially of from about 0.1 to about 0.8 vol.% carbon monoxide, from about 40 to about 80 vol.% nitrogen and from about 20 to about 60 vol.% carbon dioxide.

131. (New) The method of claim 119, wherein the gas mixture consists of from about 0.1 vol.% to about 0.6 vol.% carbon monoxide with the remainder carbon dioxide.

132. (New) The method of claim 119 further including placing the retail cut of raw meat on a foam tray.

133. (New) The method of claim 119, wherein the portion being substantially permeable to oxygen comprises a polyolefin or a polyvinyl chloride overwrap.

134. (New) The method of claim 119, wherein the gas mixture is supplied to the package such that the oxymyoglobin substantially converts directly to carboxymyoglobin.

Appl. No. 09/965,426
Amdt. dated October 7, 2003
Reply to Office Action of May 7, 2003

135. (New) The method of claim 119, wherein the oxymyoglobin substantially converts to deoxymyoglobin before the gas mixture is supplied to the package so as to convert deoxymyoglobin directly to carboxymyoglobin.

136. (New) The method of claim 119, wherein the gas mixture comprises from about 0.3 to about 0.5 vol.% carbon monoxide.

137. (New) The method of claim 119, wherein the gas mixture comprises from about 0.1 to about 0.5 vol.% carbon monoxide.

138. (New) A method of manufacturing a modified atmosphere package, comprising:
supplying a package, a first layer having at least a portion being substantially permeable to oxygen and a second layer being substantially impermeable to oxygen;
placing a retail cut of raw meat within the package;
supplying a mixture of gases within the package, the gas mixture comprising from about 0.1 to about 0.8 vol.% carbon monoxide and at least one other gas to form a low oxygen environment so as to form carboxymyoglobin on a surface of the raw meat;
removing oxygen within the package so as to sufficiently reduce an oxygen level therein so as to inhibit or prevent the formation of metmyoglobin on the surface of the raw meat;
sealing the first layer to the package;
sealing the second layer to at least one of the package and the first layer; and
opening the package before retail display such that the gas mixture exits the package.

139. (New) The method of claim 138, wherein a pocket is formed between the first layer and the second layer.

Appl. No. 09/965,426
Amdt. dated October 7, 2003
Reply to Office Action of May 7, 2003

Customer No. 30223

140. (New) The method of claim 138, wherein the second layer is at least sealed to the first layer and the opening of the package includes removing the second layer from the first layer before retail display such that the gas mixture exits the package through the first layer.

141. (New) The method of claim 138, wherein the second layer is at least sealed to the package and the opening of the package includes removing the second layer from the package before retail display such that the gas mixture exits the package through the first layer.

142. (New) The method of claim 138, wherein the package includes a bottom wall, a continuous side wall, and a continuous rim, the continuous side wall encompasses the bottom wall and extends upwardly and outwardly from the bottom wall, the continuous rim encompasses an upper edge of the continuous side wall and projects generally laterally outwardly therefrom.

143. (New) The method of claim 138 further including supplying an oxygen scavenger.

144. (New) The method of claim 138, wherein the oxygen level in the package is less than 1,000 ppm.

145. (New) The method of claim 144, wherein the oxygen level in the package is less than about 500 ppm.

146. (New) The method of claim 138, wherein removing oxygen from the package includes evacuating the package.

147. (New) The method of claim 138, wherein removing oxygen from the package includes flushing the package with the gas mixture.

148. (New) The method of claim 138, wherein the gas mixture further comprises nitrogen, carbon dioxide or the combination thereof.

Appl. No. 09/965,426
Amdt. dated October 7, 2003
Reply to Office Action of May 7, 2003

Customer No. 30223

149. (New) The method of claim 138, wherein the gas mixture consists essentially of from about 0.1 to about 0.8 vol.% carbon monoxide, from about 40 to about 80 vol.% nitrogen and from about 20 to about 60 vol.% carbon dioxide.

150. (New) The method of claim 138, wherein the gas mixture consists of from about 0.1 vol.% to about 0.6 vol.% carbon monoxide with the remainder carbon dioxide.

151. (New) The method of claim 138 further including placing the retail cut of raw meat on a foam tray.

152. (New) The method of claim 138, wherein the portion being substantially permeable to oxygen comprises a polyolefin or a polyvinyl chloride overwrap.

153. (New) The method of claim 138, wherein the gas mixture is supplied to the package such that the oxymyoglobin substantially converts directly to carboxymyoglobin.

154. (New) The method of claim 138, wherein the oxymyoglobin substantially converts to deoxymyoglobin before the gas mixture is supplied to the package so as to convert deoxymyoglobin directly to carboxymyoglobin.

155. (New) The method of claim 138, wherein the gas mixture comprises from about 0.3 to about 0.5 vol.% carbon monoxide.

156. (New) The method of claim 138, wherein the gas mixture comprises from about 0.1 to about 0.5 vol.% carbon monoxide.

157. (New) A modified atmosphere package, comprising:
a package being configured and sized to fully enclose a retail cut of raw meat, the package having a mixture of gases comprising from about 0.1 to about 0.8 vol.% carbon monoxide and at least one other gas to form a low oxygen environment so

Appl. No. 09/965,426
Arndt, dated October 7, 2003
Reply to Office Action of May 7, 2003

Customer No. 30223

as to form carboxymyoglobin on a surface of the raw meat;
a first layer having at least a portion being substantially permeable to oxygen and sealed to the package; and
a second layer being substantially impermeable to oxygen and sealed to at least one of the package and the first layer,
wherein the package is adapted to be opened such that the raw meat is allowed to be exposed to the ambient atmosphere.

158. (New) The package of claim 157, wherein a pocket is formed between the first layer and the second layer.

159. (New) The package of claim 157, wherein the second layer is at least sealed to the first layer and the second layer is adapted to be removed from the first layer such that the raw meat is allowed to be exposed to the ambient atmosphere.

160. (New) The package of claim 157, wherein the second layer is at least sealed to the package and the second layer is adapted to be removed from the package such that the raw meat is allowed to be exposed to the ambient atmosphere.

161. (New) The package of claim 157, wherein the package includes a bottom wall, a continuous side wall, and a continuous rim, the continuous side wall encompasses the bottom wall and extends upwardly and outwardly from the bottom wall, the continuous rim encompasses an upper edge of the continuous side wall and projects laterally outwardly therefrom.

162. (New) The package of claim 157 further including supplying an oxygen scavenger.

163. (New) The package of claim 157, wherein the oxygen level in the package is less than 1,000 ppm.

Appl. No. 09/965,426
Amdt. dated October 7, 2003
Reply to Office Action of May 7, 2003

Customer No. 30223

164. (New) The package of claim 157, wherein the oxygen level in the package is less than about 500 ppm.

165. (New) The package of claim 157, wherein the gas mixture consists essentially of from about 0.1 to about 0.8 vol.% carbon monoxide, from about 40 to about 80 vol.% nitrogen and from about 20 to about 60 vol.% carbon dioxide.

166. (New) The package of claim 157, wherein the package further includes a foam tray sized to hold the meat.

167. (New) The package of claim 157, wherein the gas mixture comprises from about 0.3 to about 0.5 vol.% carbon monoxide.

168. (New) The package of claim 157, wherein the gas mixture comprises from about 0.1 to about 0.5 vol.% carbon monoxide.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER: _____**

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.